



Sustainability Commission Update

October 21, 2009

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Recycle more. Waste less.

NEW Initiatives Underway

- ❑ Single Stream
- ❑ Commercial
- ❑ Source Reduction
- ❑ Outreach
- ❑ LGE
- ❑ WTE
- ❑ Possibilities...

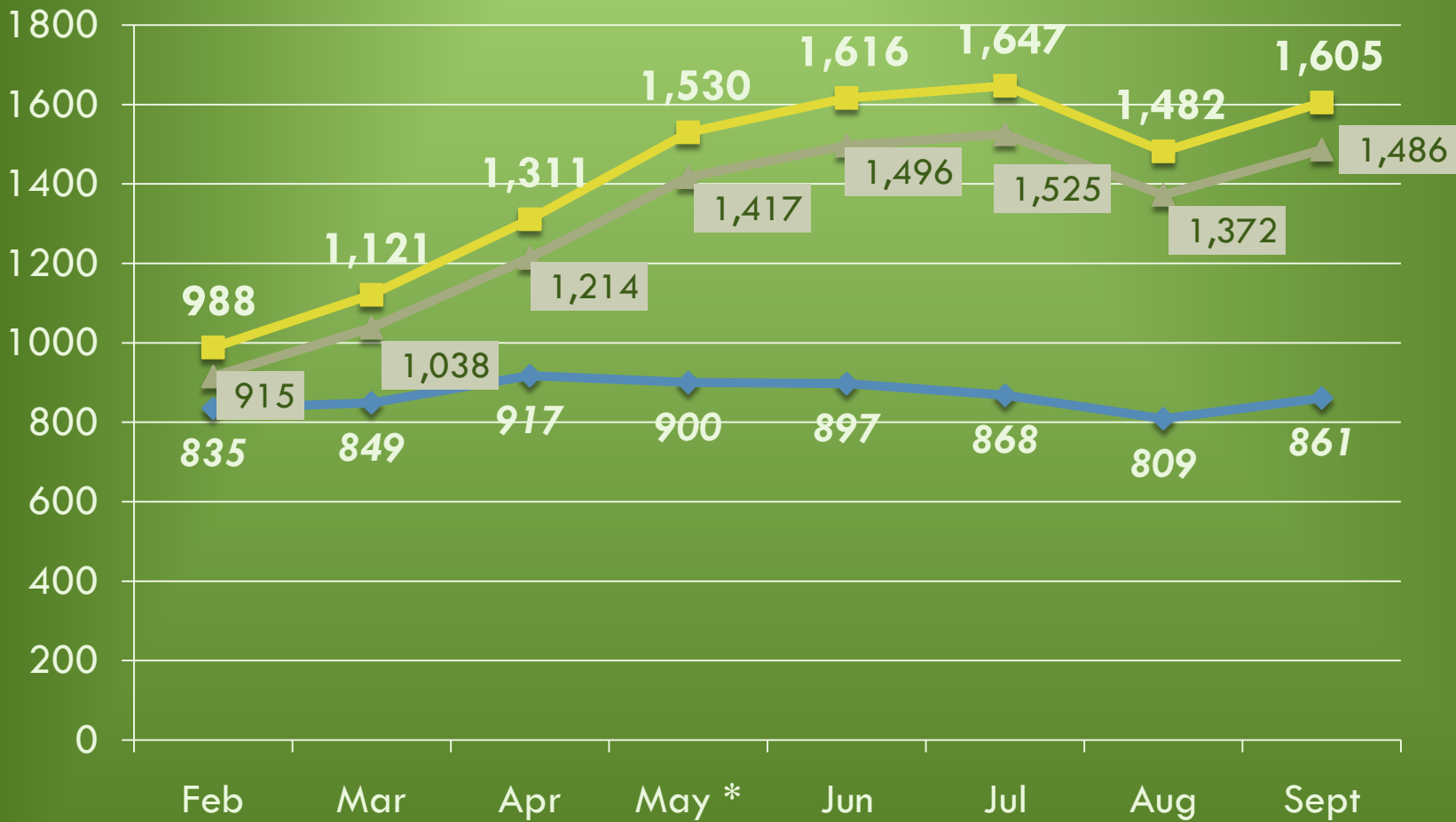


Participation & Set-Out Rates

Average Set-Out
Rate : **69 - 76%**



Curbside Tonnages 2008 vs. 2009



◆ 2008 ■ 2009 ▲ 2009 w/o Contamination

*Program Expansion completed.
Data not corrected for expansion.

Challenge Faced: Contamination

Contamination is the voluntary inclusion of unacceptable items in the recycling stream.

Contamination is a BIG problem. Contamination COSTS the County!!

Remember: “When in doubt, throw it out!”



How are other counties doing?

- Anne Arundel – 6.61%
- Baltimore City – 5.28%
- DC – 5.3%
- Howard – 2.5%

Previous
Rate:

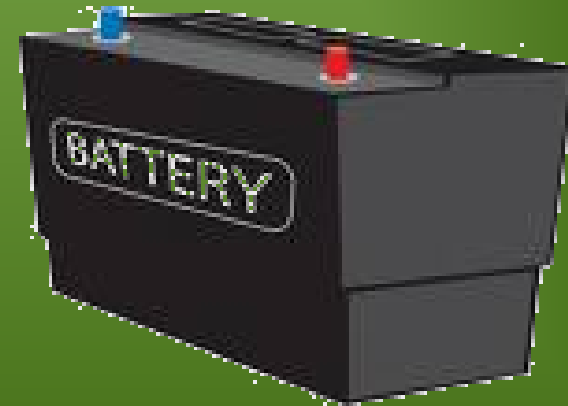
5.28%

Current
Rate:

7.39%

Cost to
County:
\$245/ton

Other Recycling Opportunities



Not Just Residential Recycling...



Leading by Example...



Frederick Community College

Frederick Community College • Frederick Maryland 21702 • 301.846.2400

The Sustainable Campus Program

Not just Residential Recycling...

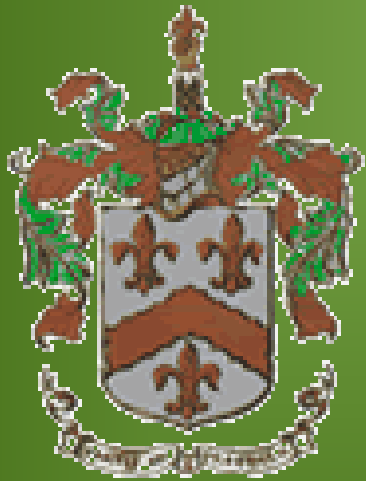
Recycling at Businesses

BUCKINGHAM'S
CHOICE

A CONTINUING CARE RETIREMENT COMMUNITY



\$25/Ton Recycling
\$76/Ton Solid Waste

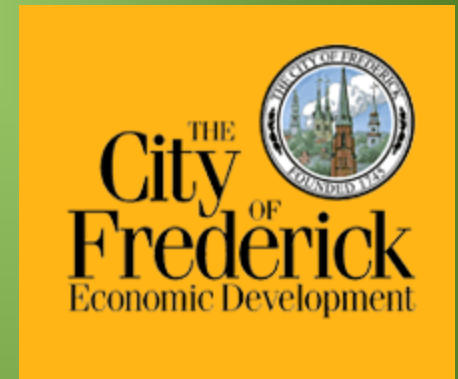
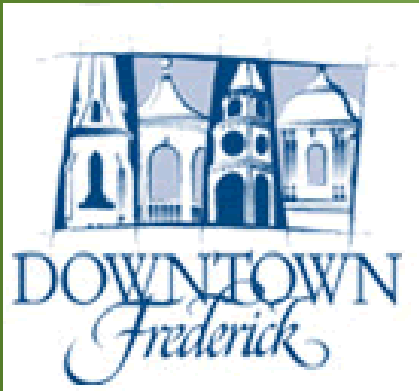


 **SABiosciences™**

Woodsboro American Legion

Not just Residential Recycling...

Partnerships



Making connections.

*Focus Forward on **GREEN** at the Great Frederick Fair*

The Great Frederick Fair and its partners request your assistance in our recycling efforts. Please deposit your empty bottles and cans in the BLUE recycling bins located around the fair.

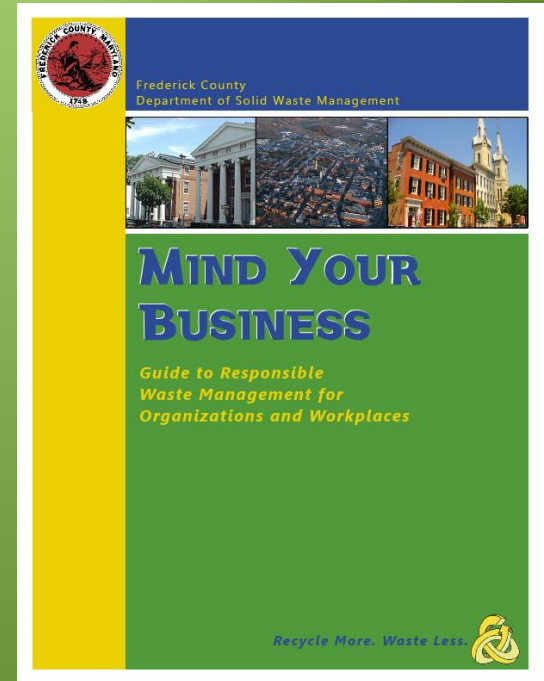
THANK YOU for recycling.



Not just Residential Recycling

Outreach to Businesses

Recognition Awards for
Businesses with Innovative
Waste Reduction Practices



Seminars for Businesses on
Recycling & Waste Reduction

New Outreach: Source Reduction

Source Reduction



SOURCE

*Refuse things you don't need
and that are not sustainable...*



toxic materials

styrofoam

plastic bags

bulk/junk mail

single-use/disposable products

excessive packaging

non-recyclable plastics







*What's "convenient" now
may become waste forever.*



Remember

The 4 "R"s:

REFUSE

REDUCTION

When making purchases, look for:

- ✓ Less packaging
- ✓ Energy efficiency
- ✓ Multipurpose products
- ✓ Durable, reusable goods

...and only buy things you need!

Cut Your Trash In Half!

Category	Percentage
Containers and Packaging	31%
Food Scraps	19%
Yard Waste	13%
Other Wastes	2%
Durable Goods	18%
Non-durable Goods	34%

U.S. MUNICIPAL SOLID WASTE GENERATED IN 2007:
254 MILLION TONS

REDUCE

...Think of it as

Recognize the Value of Durable, Reusable Products



Get Creative!



Give New Life to Old Goods:

- ✓ Goodwill Industries
- ✓ The Frederick Rescue Mission
- ✓ Habitat for Humanity ReStore
- ✓ Freecycle (www.freecycle.org)
- ✓ Craig's List (www.craigslist.org)
- ✓ Planet Aid (www.planetaid.org)
- ✓ Better World Books
(www.betterworldbooks.com)

...and shop for used items too!

Are you using recycled-content paper and tissue?



From Garbage to Garden
It's Compost Time!



REUSE

PRE-Cycling!

Frederick County
Recycles

Energy Savings of Products Made With Recycled Material

Percent Reduction in Energy Use Over Virgin Manufacturing

Material	Percent Reduction in Energy Use
Aluminum	10
Cardboard	25
Concrete	10
Steel	35
Plastic	25
Paper	40

Source: Yellow Book, 1992

Recycling is good...but even this "green" technology needs fuel, money, time, and other valuable resources to work.

The best solution is to create less waste in the first place!

Use less.
Reuse more.
Recycle the rest.

Recycling in Frederick County is about more than just bottles, cans, boxes and jars.

Did you know that yard waste, computers, electronics, linens and clothing can all be brought to the Frederick County Landfill facilities to be recycled? For more information, call the Office of Recycling at 301-600-2960 or visit our informative website: www.co.frederick.md.us/recycle

- Refrigerators
- Refrigerators and air conditioning systems
- Water heaters and pumps
- Washers and dishwashers
- Hand saws and other power tools
- Plastic bottles and containers
- #2 and #3 plastic bags
- Carpet (roll and part)
- Yes, 100% and 100% recycled content

Then Recycle

New Outreach Initiatives

comcast
SPOTLIGHT.



Landfill Gas to Energy



- Methane is a significant greenhouse gas
- Replaces current flaring (only) methane which changes methane to CO₂
- Project captures gas from Site A & Site B landfills
- Will generate up to 2 mega watts of electricity
- Electricity will be sold as green energy
- County to receive payments for gas usage, renewable energy credits and carbon credits

Waste to Energy

Solid Waste Management Hierarchy



Source: U.S. Environmental Protection Agency

Waste to Energy

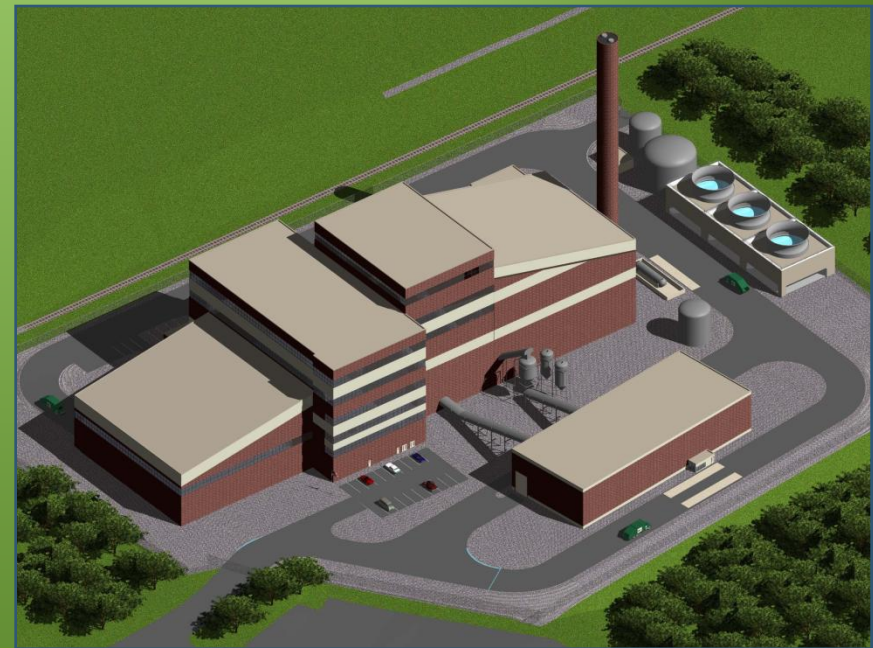
- ✓ BoCC approved a joint 1500 TPD facility with Carroll County
- ✓ 45 megawatts of energy will be produced by the facility during peak production which is enough to power ~ 30,000 homes
- ✓ Listed as a renewable energy source by the State of Maryland and the Federal Government



*Montgomery County's
Waste-To-Energy Facility
Dickerson, MD*

Waste to Energy

- ✓ Is a more preferable waste disposal option than landfills (including landfill with gas recovery)
- ✓ Viewed as carbon sink when including the offsets from burning fossil fuels and/or burying waste (including landfill with gas recovery)
- ✓ Allows for increases in recyclable recovery, particularly ferrous and non-ferrous metal recovery



*Computer rendering of proposed
Frederick County facility*

In the Works...

- ✓ Focus groups with businesses on recycling & source reduction
- ✓ Online source reduction survey
- ✓ Educational seminars for businesses
 - Proposed food waste composting pilot program
 - Proposed pilot program with apartment/condo complexes (no collection provided)
 - Proposed expansion of recycling into more parks
 - Proposed recycling program for community events



Questions???